1 BEFORE THE POLLUTION CONTROL HEARINGS BOARD STATE OF WASHINGTON 2 3 IN THE MATTER OF CITY OF BELLINGHAM, PCHB No. 84-211 Appellant, 5 FINAL FINDINGS OF FACT. ٧. CONCLUSIONS OF LAW AND 6 STATE OF WASHINGTON, ORDER DEPARTMENT OF ECOLOGY, 3 Respondent. 9

This matter, the appeal of the Department of Ecology's refusal to concur in the City of Bellingham's application for a waiver from the requirement to achieve effluent limitations based upon secondary treatment at its municipal sewage treatment plant, came on for hearing in Seattle, Washington, on January 21 and 22, 1985. Sitting as the Board were Lawrence J. Faulk, Gayle Rothrock, and Wick Dufford.

Mr. Dufford presided.

Appellant City of Bellingham was represented by Bruce L. Disend, City Attorney. Respondent Department of Ecology was represented by

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Leslie Nellermoe, Assistant Attorney General.

A pre-hearing conference was held in Seattle on January 9, 1985, and a report was made thereon controlling the subsequent course of proceedings. Post-hearing briefs and argument were submitted, the final such being received by the Board on April 4, 1985.

In the evidentiary hearing, witnesses were sworn and testified. Exhibits were admitted and examined. From the testimony heard and exhibits examined, the Board makes these

FINDINGS OF FACT

Ι

Appellant City of Bellingham (the City) is a municipal corporation which owns and operates the Post Point Sewage Treatment Plant which discharges to Bellingham Bay within the State of Washington. The plant currently provides only primary treatment.

Respondent Department of Ecology (DOE) is an agency of the State of Washington, with responsibilities for administering the laws of the state concerning water pollution prevention and control.

III

This case presents a very basic conflict: whether the treatment of municipal sewage should be upgraded to a level within the reasonable reach of recognized technology or whether a lesser level of pollutant removal should be tolerated based on a threshold of harm to the biology and uses of the receiving waters.

The question is pre-eminently an issue of policy. The task of FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER PCHB No. 84-211 -2-

this Board is to determine what the policy of the State of Washington is on this matter as expressed through existing state law.

simply put, the DOE wants Bellingham to upgrade its sewage treatment plant to secondary treatment. The City does not want to do it. At the heart of the dispute is the problem of cost.

IV

The history of efforts to combat water pollution in this country reflects this same clash between two theories of regulation: management based on receiving water quality and management based on control of effluent at the point of discharge.

The water quality approach focuses exclusively on conditions in the ambient receiving medium to which pollutants are discharged. Water quality standards are based on conditions considered necessary for uses desired to be made of the receiving waters. Such standards are, indeed, an indirect definition of pollution itself.

The effluent control approach centers on the pollutant reduction which can be achieved prior to discharge by the application of technology. For so-called point sources, this approach pushes toward requiring that what goes out the end of the pipe be as clean as the state of the art makes possible.

The effluent control approach is premised on the understanding that, most often, the pollutant removal achieved by one or more individual dischargers will result in water quality which is better than the limits described by water quality standards. In such a situation, there is room for new dischargers to use the same receiving

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medium without the occurrence of pollution, as presently defined Moreover, assuming that knowledge of the effects of adding society's wastes to water is now imperfect, technology-based limits on effluent provide a hedge against unknown long-term adverse consequences of discharges which are not accounted for in present water quality standards.

IV

Prior to 1972, the federal law of water pollution regulation was based on a cumbersome water quality-oriented scheme. On October 18, 1972, Congress overrode a presidential veto to enact Public Law 92-500, a comprehensive national program centered on the technology-based effluent control concept. The 1972 Act prohibited the discharge of pollutants to navigable waters from point sources, except as in compliance with various treatment requirements. requirements were to be imposed, principally, through a system of federal permits, entitled the National Pollutant Discharge Elimination System, giving rise to an acronym of extravagant unpronounceability--NPDES.

The Act provided for state administration of the federal permit program where the laws and administrative resources of the state were found adequate to the task. The State of Washington, through DOE, qualified for and undertook this function, merging the NPDES permit system with a pre-existing system of waste discharge permits under state law alone.

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treatment for publicly owned treatment works.

At that time most municipalities were discharging wastes receiving

required the achievement of effluent limitations based upon secondary

The Federal Water Pollution Control Act amendments of 1972

At that time most municipalities were discharging wastes receiving primary treatment or less. Primary treatment is the first step in wastewater treatment, in the main involving disinfection and mechanical separation, retention and settling to remove solids from waste water. Secondary treatment is the second step in wastewater treatment using biological methods to remove dissolved pollutants. More advanced forms of waste treatment than either primary or secondary treatment are known and in use.

VΙ

The 1972 amendments flatly required dischargers to achieve effluent limitations at the point of discharge. The fact that water quality standards were not violated in the receiving waters was no excuse from the relevant technology requirements. In the case of municipalities this meant no excuse from the requirement to achieve effluent limitations attainable by secondary treatment.

VII

Under the 1972 amendments water quality standards came into play only where the generally applicable effluent limitations were not stringent enough to achieve such standards in the receiving waters. In such situations even tougher effluent limitations were to be imposed. Water quality standards were never the basis for effluent

limitations less stringent than required by the generally applicable technology standard.

IIIV

The instant controversy is the outgrowth of a 1977 amendment to the Federal law (now called the Clean Water Act) which revived the old management by water quality approach for certain publicly owned treatment works. This marked a significant federal departure from the effluent control philosophy adopted in 1972 (and still in effect for most municipalities and for industrial sources). In fact, the federal goal enacted in 1972 (and still on the books) was the total elimination of all pollutant discharges to navigable waters in the nation by 1985.

The 1977 amendments to the Federal Act, included a new provision, Section 301(h), which provided for waivers of the secondary treatment requirement for qualifying municipalities discharging to marine waters. The "marine waiver" was to take the form of an NPDES permit issued directly by the United States Environmental Protection Agency (EPA). Issuance would depend on meeting numerous statutory tests, including criteria related to the quality of the receiving waters.

VIII

Section 301(h) allowed EPA-issued waivers, however, only with the concurrence of the state in which the discharge occurred. The statute provided no standards for such concurrence, but EPA by rule provided that:

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No section 301(h) modified permit shall be issued:...
(3) where such issuance would conflict with applicable provisions of State, local or other Federal laws or Executive Orders...

42 CFR 125.59(b)(3)

EPA, further, made the states themselves the judges of when issuance of a "marine waiver" would conflict with the state law. Under 42 CFR 125.60(b)(2), each applicant must provide a "determination," signed by the appropriate state agency, that the proposed modified discharge will comply with applicable provisions of state law. If the state does not provide such a "determination," the federal waiver process ceases. 40 CFR 125.59(e)(3).

IX

While establishing new substantive requirements, the 1972 Federal Act also brought into being a massive program of grants for the construction of municipal treatment works. In the following ten years publicly owned treatment plants across the nation were upgraded with federal grants furnishing 75 percent of the cost. In this state, additional grant funds from state sources contributed 15 percent of project costs, leaving only 10 percent to be funded from local sources in the typical case.

X

In recent years the fountain of federal and state grant funds has all but dried up. Now only a few projects each year can expect to receive funds from either source. Municipalities are now asked to plan for sewage treatment plant improvements on the basis that the full cost will have to be born locally. It goes without saying that

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this has severely dampened the enthusiasm of local officials for such projects.

XΙ

Under the Federal Act, municipalities which do not qualify for a waiver must still proceed to secondary treatment. The original deadline of mid-1977 was first allowed to be extended to mid-1983, and then, allowed to be extended again to mid-1988. Extensions can be given if federal grant money was not made available in time to meet the initial deadline. However, this linkage of treatment upgrade requirements and the availability of grant funds applies only to the timing by which secondary treatment must be achieved. The substantive obligation to achieve this level of treatment remains whether grant monies are ever received or not.

XII

In late 1975 and early 1976 (prior to the 1977 Federal Act Amendments) the City engaged an engineering firm to prepare a facility plan for upgrading the sewer system and treatment plant serving Bellingham and environs. The existing primary plant at Post Point had then been in operation for less than two years.

The facility plan was described as "the first step in a three-step process to meet the discharge requirements for treatment facilities funded, in part, by grants from the Environmental Protection Agency." The second step was to be preparation of detailed design plans and specifications, and the final step was to be construction of the facilities.

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IIIX

The Bellingham facility plan, completed in 1979, provided background information about the geographic and economic environment, examined applicable governmental regulations, analyzed present and future wastewater characteristics, evaluated alternative treatment processes and recommended a treatment system which would meet the secondary treatment requirements and serve projected growth through the year 2005. The proposed improvements were planned to be operational in 1985, subject to revision depending on the availability of government grants.

The plan took note of the passage of the "marine waiver" provisions of Section 301(h), but stated:

> The City of Bellingham evaluated the costs of applying for a secondary treatment waiver and for subsequent bay monitoring programs and decided that the probability of obtaining a waiver was not high enough to justify the expense of application. Bellingham therefore chose not to apply for a saltwater walver.

VIX

The facility plan also provided a financial plan showing estimated project costs. Total costs (including construction costs plus 5.4 percent for sales tax and 10 percent for engineering, legal and administrative fees) for the recommended treatment facilities in 1979 dollars were estimated at \$21.1 million. Of this, \$18.3 million was anticipated to be paid by federal and state grants. This left a total local cost of \$2.8 million.

The plan, additionally, projected the total estimated annual FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER PCHB No. 84-211

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operation and maintenance cost, and from all of the various cost analyses, the construction of new facilities was estimated to cause household user charges to increase by approximately \$2.86 a month. The household rate at the time was \$6.50 per month.

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XV

The methodology for the cost estimates is outlined in an appendix to the facility plan. It is there noted that the American Association of Cost Engineers divides estimates into three basic categories: order of magnitude estimates, budget estimates and definitive estimates. These are listed in ascending order of accuracy. The order-of-magnitude estimate is described, as follows:

An order-of-magnitude estimate is approximate and is made without detailed engineering data. Techniques such as cost capacity curves, scale-up or scale-down factors, and ratios are used in developing such an estimate. It is normally expected that a cost estimate of this type would be accurate within +50 percent and -30 percent in today's rapidly rising price market.

The cost predictions contained in the facility plan are stated to be order-of-magnitude estimates.

XVI

At some point, officials of the City took another look at the possibility of obtaining a Section 301(h) waiver and decided to apply. On December 22, 1982, the mayor transmitted a preliminary version of an application to EPA. This application was substantially supplemented in December of 1984 by a document developed by the same engineering firm which did the facility plan.

 IIVX

In April of 1984, DOE published a public document entitled, "State of Washington Policy and Strategy for Municipal Wastewater Management" (Document WDOE 84-4), of which the Board takes notice. This publication announced the agency's approach to the objective of upgrading municipal treatment works in an age in which grant funds for most projects will either be limited or non-existent.

Under the heading "policy" the department stated:

Responsibility for achieving compliance by the earliest possible date rests with the municipality. WDOE will provide financial and technical assistance to the extent possible. However, lack of such assistance does not excuse the municipality from compliance....

Compliance means achieving secondary treatment or greater, even though there is a marine waiver provision in the federal Clean Water Act [301(h)]. From the state persective, marine waivers authorize an interim level of treatment on the way to eventual compliance with all known available and reasonable methods of treatment (which has as its eventual end-point, secondary treatment)...

The DOE, thus, enunciated a policy whereby its decision to concur or not to concur in marine waiver cases depends on the level of preparedness of a community to undertake a secondary treatment project. Timing was made a critical factor.

IIIVX

On April 16, 1984, EPA wrote to DOE requesting that it immediately review all remaining 301(h) applications in the state and asking for the state's determination on them as soon as possible.

DOE put a task force to work on a crash program basis to comply FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER PCHB No. 84-211 -11-

with this directive.

On July 24, 1984, DOE wrote to the City and advised of its refusal to concur in the waiver application. The agency said that it could not provide a determination that the proposed discharge will comply with applicable provisions of state law.

XIX

The letter stated:

This conclusion is based on an evaluation of available information and current conditions in light of statutory requirements, including the provisions of RCW 90.52.040, which requires wastes to be provided with "all known, available and reasonable methods of treatment" prior to discharge, "regardless of the quality of the water of the state to which wastes are discharged." The department has determined that secondary treatment is "known and available," and is normally "reasonable" unless compelling evidence to the contrary is presented.

Among the criteria considered in determining "reasonable methods of treatment" were (1) the status of planning needed to proceed to secondary treatment, (2) environmental/siting constraints, and (3) economic factors. These criteria were evaluated using the city's 1979 facility plan.

ХX

This appeal followed on August 23, 1984.

As to the first two factors in DOE's reasonableness test--planning and siting--there is no contest. The Post Point site is an appropriate one and planning is sufficiently advanced to allow accomplishment of the secondary treatment project within the five-year life of an NPDES permit.

This case has focused on DOE's third criterion: the reasonableness of secondary treatment from the standpoint of project

cost.

XXI

Though some grant money might be made available, DOE's analysis of economic reasonableness assumed the non-availability of any such funds and looked at the project on the basis of 100 percent local financing.

Water quality impacts were not considered in DOE's assessment of economic reasonableness. The presupposition was that the benefits side of the ledger had already been taken care of as a matter of legislative policy. Attention was given solely to the cost side.

The Department did no independent study. It relied on data furnished by the City, on information in its own files, and on formulae from EPA publications. DOE took the cost figures from the 1979 Bellingham facility plan and attempted to update the cost of the project to 1984 dollars. A separate estimate of the capital costs was derived from EPA's handbook, "Construction Costs for Municipal Wastewater Treatment Systems: 1973-1978."

From the updated cost figures DOE approximated monthly residential use charges which would be needed to pay for the project. These charges were compared with charges actually being paid in selected cities in the state, as well as with a figure calculated by use of a formula used by EPA nationally to indicate what projects are "high cost" projects for the purposes of grant funding.

Using these approaches, DOE decided that Bellingham's project is not unreasonably expensive to build at this time.

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The City hired consultants to evaluate DOE's analysis and to prepare a financial forecast and rate impact analysis. The starting point for this work was an escalation of the construction cost numbers from the 1979 facilities plan. The cost update (to 1985) was performed by the same person who did the original estimate.

The result was a predicted total project cost of \$36.5 million—a figure which adds the effect of inflation to the initial "brick and mortar" and labor costs; and also includes \$1.25 million for a flow equalization pond originally omitted, 25 percent for engineering design, legal and administrative costs, and 7.8 percent for sales tax. The increase over 1979 costs is due primarily to factors applicable to such projects generally, not to local peculiarities in Bellingham's situation.

IIIXX

Residential users in Bellingham are currently paying \$10.50 per month in sewer charges. The rate went up from \$6.50 to \$8.50 in 1983 and from \$8.50 to \$10.50 in January 1985. Even without the secondary treatment project some rate increases, following this trend, can be anticipated.

XXIV

At the time of the non-concurrence decision in July of 1984, DOE estimated that the project could result in a user charge of \$13.92 per month based on its update to 1984 of facility plan cost figures. A charge of \$14.53 per month was derived using the EPA handbook.

The City's rate impact analysis was for the year 1990. Discounted to 1984 at the hearing, this produced a projection of \$28.79 per month.

At the hearing DOE offered revised 1984-dollar rate estimates of \$25.08 and \$26.04 per month. In a subsequent submission, the City revised its figure upward to \$31.96 in 1984 dollars.

All of these rate projections are take-offs from the original order-of-magnitude cost estimates in the facility plan. For this reason, all of the rate figures derived must be seen, at best, as rough estimates.

XXV

Applied to Bellingham, the EPA "high cost" formula yielded a hypothetical user charge of \$27.38 a month. This formula, which involves multiplying the median household income by a fixed factor is used as a national guideline in connection with grant decisions. provides a general indication of when a project is in a cost range where alternative methods of accomplishing treatment objectives should be looked at.

IVXX

In its evaluation, DOE referred to an internal memorandum which showed average residential sewer user rates for several Washington cities as exceeding \$20 per month (e.g., Bremerton, Port Orchard). The memorandum showed one entity, Pierce County, with charges totaling \$40 per month.

No attempt was made to compare Bellingham with the various entities listed in terms of system type or size, user population

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served, or municipal financial condition.

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The high purity oxygen activated sludge system proposed for Bellingham was selected in order to accommodate corn waste which creates an extraordinary demand for oxygen. At present, Bellingham Frozen Food Company, a food processing operation, contributes such wastes to the Post Point plant. The owner of this business testified that a sewer rate increase exceeding two and one-half times the present rate would preclude the company's continued use of the municipal system at present levels. Alternatives to this level of system usage have not been fully explored, but all appear very costly. The probable effect of rate increases in the range suggested would be relocation or shut down of the plant. The operation now employs about 70 full-time workers, with a peak of 300 on the payroll during the processing season.

IIIVXX

Secondary treatment is both known and available. There is no argument to the contrary. The technology has been in existence for many years. It is in common use by industries and municipalities across the nation. The expertise of several of the City's consultants is in the design of various types of systems which will provide this level of treatment. The Bellingham facility plan evidences that the technology is neither experimental nor exotic.

XXIX

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Nothing in the record demonstrates that as a generic catetory, FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER

secondary treatment involves prohibitive costs. Indeed, in Bellingham itself, a secondary plant treating over three times the volume of the Post Point municipal facility came on line 1979 at Georgia Pacific's pulp mill complex.

Moreover, the particular system type proposed for the City does not appear to be an unusually expensive variety of secondary treatment. In the facility plan the costs of alternative secondary treatment systems are compared. The proposed system (high purity oxygen activated sludge) compares favorably in cost with the other possibilities.

XXX

No evidence was presented showing any site-specific factors which will add construction costs to the upgraded treatment plant proposed for Bellingham. Nothing about the salt water location was shown to make achieving secondary treatment more costly than achieving the same pollutant reduction at a fresh water location.

IXXX

The potential dramatic effect of the secondary treatment project on user charges is not attributable to the imposition of a technology which is unusual or hard to get, or which has been shown from a comparative standpoint to be extraordinarily expensive. The effect is primarily attributable to the assumption, by all concerned, that no grant funds will be available to reduce the amount of cost born locally.

IXXXII

DOE's experience is that cost estimates for projects initially planned (as here) assuming 90 percent grant funding are significantly higher than actual costs incurred if only 50 percent or less grant funding is made available.

IIIXXX

The City did not prove that it would be beyond its capability to finance the proposed secondary treatment project at this time.

VIXXX

Evidence concerning the water quality impacts of discharges from both the City's present sewage treatment plant and the proposed upgraded facility was offered at the hearing, objected to, and received subject to a later ruling on its admissibility.

We have admitted this testimony for the limited purpose of determining that the existing quality of the receiving waters is better than the limits described by applicable water quality standards [(Class A (Excellent)], and that secondary treatment would result in additional pollutant removal. Beyond this, because of the conclusion set forth below in Conclusion of Law XI, the Board did not consider any of the water quality evidence presented in reaching its decision.

VXXX

Any Conclusion of Law which is deemed a Finding of Fact is hereby adopted as such.

From these Findings of Fact the Board comes to these

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FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER PCHB No. 84-211 Ι

We conclude that the DOE's denial of concurrence is an appealable order under chapter 43.21B RCW giving rise to a contested case.

Normally the level of treatment an entity must meet would be imposed through effluent limits in a discharge permit, issued by the state in satisfaction of the requirements of both federal and state law. However, the 301(h) "waiver" process compels a variation in this routine. The "waiver" process involves an application for a federally issued permit to allow a relaxation in the mandate for secondary treatment otherwise imposed by federal law. 33 USC 1311(b)(1)(B), 1311(h). But before federal evaluation of the application, the state must decide that such federal issuance would not conflict with applicable state law. 40 CFR 125.59(b)(3).

If, as here, the state determines that there is a conflict, the federal "waiver" process is aborted, and the state decision, in effect, returns the applicant to the normal discharge permit track. In so doing, the state decision of necessity answers a substantive state law question. The matter determined is that state law requires at least secondary treatment for discharges from the source in question.

Such a decision is, we believe, a final order which this Board can review. The Board has jurisdiction over these parties and these issues.

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FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER 27 PCHB No. 84-211

This appeal involves state law only. No federal law issues are There is one encompassing question: Can the City of Bellingham under the law of Washington be permitted to continue discharging wastes provided with less than secondary treatment?

This requires interpretation of the statutory formulation "all known available and reasonable methods of treatment* (hereafter called, the State Standard). No one argues that secondary treatment is either unknown or unavailable. The dispute is over its reasonableness.

III

The broad question of the case logically subdivides into three subissues: (1) May water quality be considered in determining what the State Standard requires? (2) Is the reasonableness of a treatment method affected, as a matter of law, by the availability of federal or state grant funds to help pay for its installation? (3) If the answer to subissues (1) and (2) is "no," is it reasonable to require Bellingham to achieve at least secondary treatment?

IV

Consideration of subissue (1) -- the water quality question--requires an excursion into the history of the State Water pollution Control Act (hereafter called, the State Act), chapter 90.48 RCW, and two related enactments: the Pollution Disclosure Act of 1971, chapter 90.52 RCW; and the Water Resources Act of 1971, chapter 90.54 RCW.

The State Act came into being in 1945. The first section originally stated:

It is declared to be the public policy of the State of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the State of Washington. Section 1, chapter 216, Laws of 1945 (Emphasis added.)

This language, still a part of the policy section of the State Act, does not in itself clearly convey whether the "methods" to be required are to be technology-based or whether non-violation of water quality standards is to be the limiting factor. Either interpretation is possible.

The remainder of the 1945 enactment does not illuminate this issue and no legislative history has been found bearing on the water.

VΙ

Prior to 1971, there were two major amendments to the State Act.

In 1955 a waste discharge permit program was added, but limited to

"commercial or industrial operations." Chapter 71, Laws of 1955; RCW

90.48.160. In 1967 the coverage of this program was broadened

somewhat and the standards for issuance were tightened. Chapter 13,

Laws of 1967, RCW 90.48.160, 180.

The 1967 amendments also included a comprehensive definition of "pollution" and a revision of the power to adopt rules. The latter

revision authorized both water quality standards and standards "for substances discharged therein" (effluent limitations). RCW 90.48.020, 035.

Neither the 1955 nor the 1967 amendments explicitly spoke to the relationship between water quality effects and the levels of treatment which could be imposed. Again, there is no helpful legislative history.

VII

In 1971, the State Standard appeared in two measures adopted in the same session: the Pollution Disclosure Act (Section 4, chapter 160 Laws of 1971 ex.sess.) and the Water Resources Act (Section 2, chapter 225, Laws of 1971). These are now codified as RCW 90.52.040 and RCW 90.54.020(3)(b), respectively.

The first reads:

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In the administration of the provisions of chapter 90.48 RCW, the director of the department of ecology shall, regardless of the quality of the water of the state to which wastes are discharged or proposed for discharge, and regardless of the minimum water quality standards established by the director for said waters, require wastes to be provided with all known, available, and reasonable methods of treatment prior to their discharge or entry into waters of the state. RCW 90.52.040.

The second reads:

Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters would not be violated, wastes and other materials and substances shall not be allowed to enter such waters

which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest would be served. RCW 90.54.020(3)(b).

The meaning and applicability of these sections are at the heart of this case. From their plain language, the apparent purpose was to clarify the State Standard and unambiguously establish a technology-based system in this state. Subsequent amendments to the State Act support this interpretation.

VIII

The permit system was extended to municipalities or public corporations operating sewer systems in 1972. Section 1, chapter 140, Laws of 1972 ex.sess. In adding these entities to the system, the Legislature stated:

> ...this section is intended to extend the permit system of RCW 90.48.160 to counties and municipal or public corporations and the provisions of ... RCW 90.52.040 shall be applicable to the permit requirements of this section. RCW 90.48.162. (Emphasis added.)

Explicitly, then, the version of the State Standard appearing in the Pollution Disclosure Act was incorporated into chapter 90.48 RCW and made to apply to the newly covered class of permittees. Thus, the entire category of point source discharges appeared to be within the reach of the terms of RCW 90.52.040 as of 1972.

This was the evident understanding of Governor Evans who in item-vetoing a delay in the effective date for requiring permits of municipal discharges stated:

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... The purpose of [this legislation] is to provide for a truly comprehensive permit program by making it applicable to the one large group of dischargers not now within its coverage, the county and municipal sewerage plants.... [T]here is a high probability that Congress will establish a "national waste elimination permit program" within the near future. This new federal program contemplates state control of waste discharge permits if the state law meets federal criteria which include a requirement that the state program cover all major discharges into public By this veto the state will be in a much better posture to continue its program without interruption by a federal agency should the proposed federal legislation be enacted prior to the next session of our legislature. (Emphasis added.)

At the time of this veto message it was well known that Congress was contemplating a technology-based national program and, indeed, about eight months later Public Law 92-500 was enacted establishing such a federal system. The Governor must have assumed that the existing substantive treatment standard of state law would meet the federal criteria and that the extension of coverage was all that was necessary to conform the state system to the new federal scheme.

ΙX

If there remained any doubt that the state had adopted a technology-based system, it should have been laid to rest in 1973 when the Legislature amended a section granting general power to participate in federal programs and provided a detailed grant of power to issue permits satisfying requirements of the new federal NPDES system. Section 1, chapter 155, Laws of 1973; RCW 90.48.260. The amendment stated, in part:

...the powers granted herein include...[c]omplete authority to establish and administer a comprehensive state point source waste discharge or pollution

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discharge elimination program which will enable the department to qualify for full participation in any national waste discharge or pollution discharge elimination permit system...

To the extent that this amendment may have added to existing substantive law, it must have firmly established the State Standard as a technology-based treatment provision. Such clearly was the nature of the federal standards, which as to municipalities, called expressly for effluent limitations based upon secondary treatment by mid-1977. Section 301(b)(1)(B); 33 USC 1311(b)(1)(B).

Another section of the 1973 amendments, codified at RCW 90.48.262(1), drives the point home even more forcefully:

...The permit program authorized under RCW 90.48.260(1) shall constitute a continuation of the established permit program of RCW 90.48.160 and other applicable sections within chapter 90.48 RCW. The appropriate modifications as authorized in this 1973 amendatory act are designed...to insure that the state permit program contains all required elements of and is compatible with the requirements of any national permit system.

X

The "marine waiver" provisions of Section 301(h) of the federal statute, adopted four years later in 1977 [33 USC 1311(h)], have no state law analogue. As noted in 1973, the state law was consciously altered to insure that it was at least as stringent as the 1972 version of the federal statute. However, the State Act has never subsequently been amended to mirror the 1977 weakening of the federal scheme for marine discharges by municipalities.

Section 510 of the Federal Act, 33 USC 1370, authorizes states to

enforce standards which are more stringent than those imposed federally. The federal scheme does not require states to weaken their standards when the federal government weakens its standards and our Legislature has not done so.

RCW 90.48.260 has been amended twice since 1973. In 1979 the words "as amended" were inserted after "Federal Water Pollution Control Act." Section 1, chapter 267, Laws of 1979 ex.sess. In 1983, the term "Federal Water Pollution Control Act" was replaced with "federal clean water act." Section 1, chapter 270, Laws of 1983. The most that can be deduced from these simple changes is that our Legislature intended the state to pick up the authority to comply with any new federal requirements which may have been added by amendments to the federal act. But, nothing appears in these terse changes which, in any way, indicates a conscious legislative decision to retreat from the technology-based approach to treatment. Nothing distinguishes between the treatment of discharges to salt water and other discharges. Nothing suggests a separate standard to be applied to municipalities as opposed to commercial and industrial operations.

Section 301(h) does not impose new requirements for states administering the federal act. It creates an optional procedure which states may choose to reflect in state law or not. The State of Washington has not chosen to adopt a "marine waiver" exception to the technology-based State Standard.

XΙ

We conclude that the State Standard as expressed in currently

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effective legislation calls for the imposition of methods of treatment based on technology and that, in the instant case, water quality considerations are irrelevant to the selection of the technology to be imposed.

We need not decide if water quality considerations might be relevant under state law where the discharge is to severely degraded waters or where existing water quality or water quality standards would be exceeded absent extraordinary treatment efforts. None of these is the problem here.

IIX

The argument that RCW 90.52.040 (quoted in full in Conclusion VII above) applies only to the commercial and industrial operations required to report under the Pollution Disclosure Act is contradicted by the plain language of the section which makes it applicable to "the administration of the provisions of chapter 90.48 RCW," and is definitively refuted by the section's express incorporation into RCW 90.48.162, which extends the permit program to municipalities.

RCW 90.52.040 applies to municipalities.

TIIX

Furthermore, we reject the notion that RCW 90.52.040 rules out only considerations of existing water quality, but not of the effects of proposed discharges in the process of technology selection. To look at water quality effects without looking at existing water quality would be virtually impossible. Moreover, such a reading would, in practice, make water quality the driving force in choosing

the levels of treatment to be achieved. This is precisely the opposite of what the legislative evolution of the State Standard points to. It is an interpretation undercutting the whole concept of a technology-based system and would render illusory the attempts to make state law conform to the 1972 federal act. We decline to adopt it.

VIX

There is no conflict between RCW 90.52.040 and RCW 90.54.020(3)(b) (quoted in full in Conclusion VII). Both passed in the same session and should be construed as in the same spirit and actuated by the same policy. Daviscourt v. Peistrup, 40 Wn. App. 433, ______ P.2d _____ (1985).

RCW 90.54.020(3)(b) supplements the State Standard with a non-degradation policy which arguably could require more stringent technology than ordinarily necessitated by the Standard. Where, as here, degradation is not threatened, the subsection does not make water quality relevant to the choice of technological alternatives.

xv

The State Act requires that a permit be obtained before wastes are discharged into the waters of the state. RCW 90.48.160, 90.48.162. The waters of Bellingham Bay are waters of the state. RCW 90.48.020.

RCW 90.48.180 provides, in pertinent part:

The [DOE] shall issue a permit unless it finds that the disposal of waste material as proposed in the application will pollute the waters of the state in violation of the public policy declared in RCW 90.48.010. The [DOE] shall have authority to specify conditions necessary to avoid such pollution in each

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permit under which waste material may be disposed of by the permittee:

Water quality standards represent the determination of DOE as to what constitutes pollution. <u>Centralia v. DOE</u>, PCHB No. 84-287 (1985); RCW 90.48.040, 90.48.035. Thus, no waste discharge permit may be issued at all if the disposal of wastes as proposed would violate water quality standards.

However, this does not mean that water quality considerations became relevant to the level of treatment to be imposed when both existing and predicted water quality is better than the polluted level described by water quality standards. The imposition of a technology-based treatment standard under these circumstances is wholly consistent with RCW 90.48.180.

Moreover, under the statutory scheme as a whole, the power to specify conditions is not limited to those "necessary to avoid...pollution." Conditions which will do much better than that are also authorized. Were this not so, RCW 90.52.040 and RCW 90.54.02093)(b) would be meaningless.

IVX

The conclusion we reach on the water quality issue, as a matter of state law, is consistent with decisions concerning treatment requirements of the federal act. Except where water quality considerations may have been made expressly applicable by the statute, they have been held an improper subject of consideration in analyzing requests to reduce the level of treatment required. See Crown Simpson Pulp Co. v. Castle, 642 F.2d 323 (9th Cir. 1981); Appalachian Power v.

EPA, 671 F.2d 801 (4th Cir. 1982).

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XVII

This brings us to subissue (2) -- the relevance of grant availability. As with water quality, the non-availability of grant assistance has been held irrelevant to the substantive duty to meet specified levels of treatment under the federal act, except where explicitly made applicable in the statute. State Water Control Board v. Train, 559 F.2d 921 (4th cir. 1977).

We adopt the same analytical approach in approaching this question as a matter of state law. Nothing in chapter 90.48 RCW or in any related statutes suggests that the duty to provide the appropriate technology is in any way dependent upon whether federal or state grant assistance will be provided. Nothing suggests that the reasonableness of a particular level of treatment is connected with whether the costs of a project are spread to the taxpayers of the nation or of the state rather than paid solely by the local citizens directly served.

Therefore, we conclude there is no linkage in law between grant fund availability and the level of treatment which may be required. This is the interpretation adopted by DOE in their 1984 "State of Washington Policy and Strategy for Municipal Wastewater Management." As the construction of the responsible agency, this view is given great weight. Pedersen v. Department of Transportation, 25 Wn.App. 781, 6711 p.2d 1293 (1980); Weyerhaeuser v. DOE, 86 Wn.2d 310, 545 P.2d 5 (1976).

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Finally, we turn to subissue (3)—the general question of reasonableness. Since neither water quality nor the availability of grant funds may be considered in the selection of treatment technology, what constitutes reasonableness under the State Standard is a limited inquiry.

In 1983 DOE posed the following question to the Attorney General:

Under state law may a municipality discharge wastes from its sewerage system into Puget Sound or other marine waters, without providing secondary treatment?

The answer is set forth in AGO 1983 No. 23, a formal opinion construing the State Standard. The core of the response is as follows:

The precise level of treatment required by those general standards involves, primarily, engineering determinations; i.e., as to what treatment methods are "known," what treatment methods are "available," and what treatment methods are "reasonable" with respect to the particular installation in light of the factual circumstances surrounding it. To make these determinations a review must be conducted by the department of existing engineering technologies in order to enable it to decide which methods of treatment—including but not limited to "secondary treatment" as above defined—are suitable with respect to the waste situation involved in the particular case.

DOE's response was to make a generalized engineering determination, expressed in its municipal strategy document, that secondary treatment is ultimately required of all municipalities by the State Standard. However, it provided for case-by-case evaluation of each municipal discharge to determine if the generalized determination is appropriate for that source at the time the question is asked. Thus, in its

denial of concurrence here, DOE stated that secondary treatment is "normally 'reasonable' unless compelling evidence to the contrary is presented."

This approach essentially establishes a generic treatment level as appropriate for the entire class of municipal dischargers and, then, allows for a kind of variance from this level on a showing of "compelling evidence." This decisional model is similar to the approach taken by EPA in requiring a showing of "fundamentally different" factors affecting an industrial discharge before allowing it to vary from treatment requirements set on a category-wise basis.

See EPA v. National Crushed Stone Association, 449 U.S. 64, 66 L.Ed.
2d 263, 101 S. Ct. 295 (1980).

We conclude that, in this case, the technique of analysis used by DOE is consistent with the State Act. There is no quarrel here about the selection of secondary treatment as a matter of engineering judgment. No one argues that the kind of secondary system proposed in the City's facility plan will present extraordinary technical problems to complete and place in operation. The argument is about factors having nothing to do with engineering.

XX

As to non-engineering factors bearing on reasonableness, DOE considered three: (1) planning status, (2) environmental or siting constraints, and (3) economics. Except for those matters we have concluded are irrelevant; <u>i.e.</u>, water quality and grant availability, there is no contention that DOE failed to evaluate any factors it was

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legally obliged to consider. Thus, we limit our inquiry to whether the agency rightly decided the reasonableness question in light of the factors it did consider.

XXI

No evidence was presented concerning any impediment to a secondary treatment project by the City caused by either planning status or environmental or siting constraints. DOE's reasonableness determination, thus, rises or falls on the "economics" consideration.

XXII

The economic aspect of the reasonableness criterion of the State Standard is, we conclude, defined by two propositions: (1) whether secondary treatment for the source would involve significantly greater costs than for others obliged to obtain the same levels of treatment, and (2) whether secondary treatment is within the economic ability of the source to meet the costs of treatment.

EPA's refusal to consider the second of these propositions in industrial variances was upheld in National Crushed Stone Association, supra. But, underlying this conclusion was the realization that a single plant unable to come up to industry-wide standards can simply cease operations. This is a luxury municipal sewage treatment facilities do not enjoy. The sewage must go some place. Therefore, in interpreting the state law requirement for reasonableness as to municipalities, we think it is appropriate to include the "ability to pay" factor. Cf. Weyerhaeuser v. Southwest Air Pollution Control Authority, 91 Wn.2d 77, 586 P.2d 1163 (1978).

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Under the evidence, it is clear that building a secondary treatment facility would be costly for the City and for the citizens served. However, neither significantly greater comparative project costs nor costs beyond the City's ability to bear were shown on the record made to this Board. Borrowing from federal terminology there is nothing "fundamentally different" about the Bellingham project.

XXIII

Under the facts of this case, secondary treatment was not shown to fall outside the reasonableness criterion of the State Standard.

Therefore, we hold that DOE was correct in refusing to concur in the City's marine waiver application. Such a waiver would conflict with applicable provisions of state law.

XXIV

In reaching our conclusion in this case we disclaim any intention of rendering personal views on what the state law ought to be in relation to marine waivers. Our opinion is limited to setting forth what we believe the law of Washington is on the subject. Whether the law should be retained in its present form or changed is a broad question of policy, properly addressed to the Legislature.

XXV

Any finding of Fact which is deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions of Law the Board enters the following

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ORDER The non-concurrence decision of the Department of Ecology announced in its letter to the City of Bellingham dated July 24, 1984, is affirmed. DONE this 192 day of June, 1985. POLLUTION CONTROL HEARINGS BOARD (See Concurring Opinion)
LAWRENCE J. FAULK, Chairman H

FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER PCHB NO. 84-211

LAWRENCE J. FAULK-CONCURRING OPINION

I write separately because even though I reluctantly concur with the result reached by the majority, I wish to emphasize some points not discussed in that opinion.

The result reached by this Board is unfortunate but is required by the law of the state of Washington,

I

WATER QUALITY

RCW 90.52.040 reads:

In the administration of the provisions of chapter 90.48 RCW, the director of the department of ecology shall, regardless of the quality of the water of the state to which wastes are discharged or proposed for discharge, and regardless of the minimum water quality standards established by the director for said waters, require wastes to be provided with all known, available, and reasonable methods of treatment prior to their discharge or entry into waters of the state. (Emphasis added).

This section of the law says clearly that whether the receiving water quality is excellent or very poor makes no difference as to what treatment method is required.

Bellingham's water has been analyzed by both state and city The result is that Bellingham's water has, in fact, been designated under state water quality standards as class "A," Excellent quality. The only standard higher is class "AA," or "Extraordinary." The city's expert witnesses, Mr. Gene Suhr, testified that secondary treatment could not improve the quality of Bellingham's water. Furthermore, class "AA" water simply is not achievable in Bellingham LAWRENCE J. FAULK -- CONCURRING OPINION

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Bay due to the amount and characteristics of fresh water which feed. the Bay.

Clearly, in my view, if this Board could have taken into account the quality of the receiving water, secondary treatment would not have been required for the city of Bellingham.

The federal Clean Water Act provides for a waiver of the secondary treatment requirement for publicly owned treatment plants imposed by subsection 301(b)(1)(B) of the Act where such plants discharge to marine waters.

Federal Clean Water Act 301(h) reads:

- (h) The Administrator, with the concurrence of the State, may issue a permit under section 402 which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant in an existing discharge from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that—
 - (1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;
 - (2) such modified requirements will not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;
 - (3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable;

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(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

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- (5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;
- (6) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;
- (7) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters* refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator necessary to allow compliance determines paragraph (2) of this subsection, and of this Act. A municipality which 101(a)(2) applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. USC 1311(h).

The federal law is clearly a water quality based standard, while the state law is a technology based standard. Until the legislature resolves this matter, this conflict will continue to exist with the attendant results that one sees in this case.

Those results include requiring the city of Bellingham to spend LAWRENCE J. FAULK--CONCURRING OPINION PCHB No. 84-211 3

\$61,530,000 (Exhibit A-8) in public funds and pay an estimated monthly residential sewage charge of \$39.69 in 1990, to install secondary treatment. (Testimony of city expert witnesses John Maxwell and Bill Clouter). This figure exceeds the rate for a "high cost project" under federal guidelines which is \$27.38 per month according to DOE witness Bernard Jones. Yet the testimony before this Board, by the city, is that there is no adverse effect on water quality from the city's discharge without secondary treatment. The Department of Ecology did not consider the water quality of Bellingham Bay.

ΙI

REASONABLENESS

The Department of Ecology has chosen to define "reasonable" in terms of three criteria: (1) the status of planning needed to proceed to secondary treatment; (2) environmental siting constraints; and (3) economic factors.

The City's appeal focused upon the economic criterion. The Department of Ecology's economic criterion include a variety of concerns, but the basic one was cost. What will the cost of building a secondary treatment plant be? What will the cost of operating a secondary treatment plant be? How will those costs affect the City's sewer rate structure?

It is apparent from the record in the case, that the weight of economic testimony is on the side of Bellingham. This is because it was supported by the testimony of qualified experts as opposed to the Department's witnesses. DOE's witnesses clearly did not have the

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proper expertise to analyze the subject of user rates, investment banking practices or economic forecasting.

For instance, DOE justified its user-rate analysis for the City of Bellingham on the basis of the administrative convenience of simply updating the 1979 facilities plan estimates, whereas the City's user-rate analysis was based on more specific estimating techniques, which were supported by professional expertise including that of an investment banker and financial analyst with special expertise in feasibility and financing of sewage treatment projects.

Further, despite the fact that EPA's financial guidelines provide for states to examine the impact of sewage treatment projects to low income users by comparing project costs with the ability of those persons in the bottom quartile of income to pay, DOE did not refute the city testimony regarding the large percentages of the city workforce that is unemployed (in excess of 10% and the city population that is either senior citizen or single family heads of household.

Finally, if DOE is to make judgments like this then they need to be able to correctly estimate the costs of projects such as this by including the following categories of cost; engineering, legal, financial, contingency, overhead, interim interest expense, revenue bond reserve, debt service, revenue bond coverage and sales tax.

III

CONCLUSION

Secondary treatment is economically excessive and could cause adverse environmental impacts (sludge disposal) without corresponding LAWRENCE J. FAULK--CONCURRING OPINION PCHB No. 84-211 5

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benefits. Either of these problems is, in and of itself, sufficien, proof of the undue burden of secondary treatment for Bellingham; combined with the huge economic price tag of secondary treatment and the resulting adverse environmental impacts without corresponding benefits to water quality, beneficial uses and aquatic life, causes a waiver denial to violate any standard of fairness.

The legislature will be disappointed, I think, to learn that in enacting the water pollution laws, it was allowing a government agency to force secondary treatment on communities regardless of the effect on the quality of the marine receiving waters.

The point is that if primary treatment has no adverse effect on the marine receiving waters as is the case in Bellingham, then it should be allowed to be discharged and the municipality should not be forced to pay for secondary treatment.

I think the legislature's disappointment will continue unabated when they discover that state law has removed the authority from this Board to make that judgment, on a case-by-case basis.

For these reasons, I believe the law should be changed to allow the quality of the receiving waters to be considered in determining whether a municipal treatment plant discharging to marine waters needs to install secondary treatment.

FAULK, Chairman

DATED this 19th day of June, 1985.

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